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ABSTRACT

This report describes two programs in Saginaw, Michigan, that are designed to meet the special education needs of bilingual and migrant students. The focus of the report is a product evaluation using the results of students' test performance. The Section 41 State Bilingual Education Program and the Chapter 1 Migrant Education Program operated at 21 elementary schools, 4 junior high schools, and 2 high schools. The state bilingual program served approximately 709 students during the 1989-90 school year with reading instruction, instruction in other basic skills, and counseling services. The migrant program, largely in cooperation with the bilingual program, served 775 K-12 students. The California Achievement Tests (CAT) served as evaluation instruments for these students. The attainment of the performance standard by program, subject, and grade is presented. Mean posttest Normal Curve Equivalent (NCE) scores showed improvement over pretest NCE scores. K-12 students were pre- and post-tested to determine their achievement in reading and mathematics, as required by the funding sources. The CAT evaluation also looked specifically at fulfillment of the elementary-level reading comprehension objectives. Test results indicate a bilingual-program increase in the percentage of grade levels meeting reading and mathematics performance standards over the previous year. The migrant results show a decrease from the previous year in reading and an increase in math. The following program improvements are recommended: (1) reduced variations among building sites; (2) better program monitoring; (3) lower student-to-staff ratios; (4) improved consistency in the secondary-level advisor program; and (5) more parent-related activities. The document includes 5 appendices and 17 tables, most of which are found in the appendixes. (TES)

ED326351

# EVALUATION REPORT

STATE BILINGUAL AND ECIA
CHAPTER 1 MIGRANT PRODUCT
EVALUATION REPORT

1989-90

## DEPARTMENT OF EVALUATION SERVICES

- PROVIDING ASSESSMENT, PROGRAM EVALUATION AND RESEARCH SERVICES -

SCHOOL DISTRICT OF THE CITY OF SAGINAW

**Saginaw, Michigan**

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RC017853

# STATE BILINGUAL AND ECIA CHAPTER 1 MIGRANT PRODUCT EVALUATION REPORT

1989-90

An Approved Report of the
DIVISION OF ADMINISTRATION AND PERSONNEL
Department of Evaluation, Testing, and Research


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July, 1990

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## PROGRAM DESCRIPTION

The Section 41, State Bilingual Education program and the E.C.I.A. Chapter 1, Migrant Education program are programs designed to meet the special educational needs of State Bilingual and Migrant students in the School District of the City of Saginaw. These programs were operated by the school district during the 1989-90 school year.

The State Bilingual and Migrant programs operated at 21 elementaries, four junior highs, and both high schools. (See Appendix A for number of students participating by building as of January 15, 1990 computer run prior to February tracking). Instruction was provided primarily on a pull-out basis, with each student receiving approximately thirty minutes of supplemental instruction per week.

The amount of time for supplemental instruction per week is 50% less than last year when each student received approximately one hour of supplemental instruction per week. This reduction in instructional time was caused in large part by the declining numbers of State Bilingual and Migrant students district-wide. The number of eligible students determines the funding for staff.

### STATE BILINGUAL PROGRAM

The State Bilingual program served approximately 709 students during the 1989-90 school year. The vast majority of the students were Hispanic, with a small number of Laotian students completing the program population.

Instruction was provided to K-6 students in reading. Students in grades 7-12 also received instruction in the basic skills, as well as counseling and support services.

## MIGRANT PROGRAM

The Migrant program provided supplemental reading instruction for the children of Migrant workers. A total of 775 students K-12 participated in the program.

The Bilingual program served students whose primary language was other than English, or who came from a home environment where a language other than English was regularly used. The Migrant Education program served students whose families follow the crops or fishing industry for a livelihood, and as a result the students experienced educational discontinuity. Although the program philosophies differ, the student populations overlap because, in most circumstances, a student in the Migrant program comes from an environment where English was not the primary language spoken in the home. In view of this fact, these two programs cooperate as one, the staff serving the students were the same, and all materials and activities were shared by the programs. (See Appendix B for a complete description of the students eligibility criteria.)

Both process and product evaluations were undertaken for the State Bilingual and Migrant programs. This year's process evaluation was accomplished by three mailed surveys: 1) a survey to advisors at their support service sites; 2) a survey to teachers at their instructional sites; and 3) a survey to a random sample of regular education teachers (N=159). The surveys to advisors and State Bilingual/Migrant teachers were sent via interoffice mail on December 11, 1989 and the survey to regular education teachers were sent on December 14. 1989. All State Bilingual/Migrant staff plus a sample of 159 of the 632 regular education teachers were requested to return their completed surveys by December 20, 1989 and December 21, 1989 respectively. The results of these process surveys were presented in a separate report published and disseminated earlier in the year.

The product evaluation, which is the focus of this report, addresses the results of student test performance. The California Achievement Tests (CAT) Form E and F normed the Spring of 1985 served as the evaluation instruments for grades K-12 (Form E for all grades except grades 9 and 10). This was the tenth year that norm referenced tests approved by the Michigan Department of Education were used for program evaluation. The locally adopted performance standard used to evaluate program success was that: mean post-test Normal Curve Equivalent (NCE) scores will evidence improvement over pre-test NCE scores. Attainment of this standard means that student rates of learning have exceeded their normal learning rate. The reader should bear in mind that most of these students have not learned at normal rates in the past.

Students in grades K-12 were pre- and post-tested with the CAT on a spring-to-spring basis to determine their achievement in reading and mathematics as required by the funding sources. All testing was performed on-level, that is, students took a test at a level of difficulty appropriate for their grade.

This year the product evaluation was further refined to look specifically at the elementary level (grades 1-6) reading comprehension objectives instructed over the course of the programs. These reading objectives, which are measured on the CAT, are stated in the chart below. The chart gives the grade(s) at which they are taught/measured.

| | GRADE | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| LITERAL COMPREHENSION | | | | | | |
| 33 Stated Main Idea<br>The student will identify the main idea stated in a passage. | X | | | | | |
| INFERENTIAL COMPREHENSION | | | | | | |
| 36 Central Thought<br>The student will infer the central thought of a passage, such as the main idea, the author's purpose or viewpoint, or the tone or mood. | | X | X | X | X | X |
| 37 Interpreting Events<br>The student will interpret a passage by drawing conclusions, identifying cause and effect relationships, or predicting outcomes. | X | X | X | X | X | X |
| CRITICAL COMPREHENSION | | | | | | |
| 39 Writing Techniques<br>The student will interpret figurative or presuasive language or interpret structural techniques of writing. | | | | X | X | X |

The locally agreed upon standard was that program participants will equal or exceed district-wide Spring, 1989 mastery levels on these selected CAT reading objectives (see Appendix C for the specific mastery levels by objective and grade).

## PRODUCT EVALUATION RESULTS

Overall achievement results in reading and mathematics will be presented for each program. Grade level results by subject area for each program will be presented and discussed. Finally the combined results of the two programs will be presented relative to the elementary reading comprehension objectives specified earlier. Where relatively few students were tested at any grade level and for a building, the results should be viewed with caution.

### OVERALL ACHIEVEMENT FOR STATE BILINGUAL

#### Reading

Table 1 below contains the grade level results for the State Bilingual program in reading.

**TABLE 1. ATTAINMENT OF THE PERFORMANCE STANDARD* IN READING IN TERMS OF NORMAL CURVE EQUIVALENT (NCE) SCORES FOR STATE BILINGUAL PROGRAM PARTICIPANTS TESTED SPRING TO SPRING, GRADES K-12, 1989-90.**

| Grade | Number of Students Tested | Normal Curve Equivalent | | | Performance Standard* Attained |
|---|---|---|---|---|---|
| | | Pre Mean | Post Mean | Mean Gain/ Loss | |
| K | 7 | 39.8 | 49.7 | 9.9 | Yes |
| 1 | 177 | 36.4 | 43.5 | 7.1 | Yes |
| 2 | 69 | 41.0 | 46.2 | 5.2 | Yes |
| 3 | 20 | 33.5 | 40.4 | 6.9 | Yes |
| 4 | 15 | 35.0 | 38.6 | 3.6 | Yes |
| 5 | 10 | 38.0 | 3... | -1.7 | No |
| 6 | 30 | 34.7 | 34.8 | 0.1 | Yes |
| 7 | 22 | 31.7 | 31.4 | -0.3 | No |
| 8 | 17 | 35.7 | 36.7 | 1.0 | Yes |
| 9 | 35 | 30.8 | 33.4 | 2.6 | Yes |
| 10 | 13 | 29.0 | 20.9 | -8.1 | No |
| 11 | 6 | 11.3 | 24.0 | 12.7 | Yes |
| 12 | 4 | 38.2 | 3.2 | -35.0 | No |

*Post-test Normal Curve Equivalent (NCE) score will evidence improvement over pre-test NCE score.

Students in grades K, 1, 2, 3, 4, 6, 8, 9 and 11 demonstrated positive NCE gains between 0.1 to 12.7 NCE units. Students in grades 5, 7, 10 and 12 did not attain the standard. Thus nine of the 13 (69.2%) grades attained the performance standard.

**Mathematics**

Grade level results are presented in Table 2 below.

**TABLE 2. ATTAINMENT OF THE PERFORMANCE STANDARD* IN MATHEMATICS IN TERMS OF NORMAL CURVE EQUIVALENT (NCE) SCORES FOR STATE BILINGUAL PROGRAM PARTICIPANTS TESTED SPRING TO SPRING, GRADES K-12, 1989-90.**

| Grade | Number of Students Tested | Normal Curve Equivalent | | | Performance Standard* Attained |
|---|---|---|---|---|---|
| | | Pre Mean | Post Mean | Mean Gain/ Loss | |
| K | 7 | 35.1 | 43.8 | 8.7 | Yes |
| 1 | 177 | 38.3 | 52.3 | 14.0 | Yes |
| 2 | 69 | 55.7 | 52.9 | -2.8 | No |
| 3 | 20 | 36.2 | 41.8 | 5.6 | Yes |
| 4 | 15 | 46.6 | 43.2 | -3.4 | No |
| 5 | 10 | 47.5 | 49.1 | 1.6 | Yes |
| 6 | 30 | 44.8 | 45.2 | 0.4 | Yes |
| 7 | 22 | 46.9 | 44.3 | -2.6 | No |
| 8 | 17 | 41.2 | 43.0 | 1.8 | Yes |
| 9 | 35 | 38.7 | 41.6 | 2.9 | Yes |
| 10 | 13 | 35.8 | 20.4 | -15.4 | No |
| 11 | 6 | 23.0 | 41.0 | 18.0 | Yes |
| 12 | 3 | 54.3 | 3.0 | -51.3 | No |

*Post-test Normal Curve Equivalent (NCE) score will evidence improvement over pre-test NCE score.

Students tested met the performance standard at all grades except grades 2, 4, 7, 10 and 12. First grade students demonstrated the greatest positive NCE gain of 14.0 NCE units while sixth graders had the smallest positive gain of 0.4 NCE points. Overall eight of the 13 (61.5%) grades attained the performance standard.

## OVERALL ACHIEVEMENT FOR MIGRANT

### Reading

Grade level results are presented in Table 3 below.

**TABLE 3. ATTAINMENT OF THE PERFORMANCE STANDARD* IN READING IN TERMS OF NORMAL CURVE EQUIVALENT (NCE) SCORES FOR MIGRANT PROGRAM PARTICIPANTS TESTED SPRING TO SPRING, GRADES K-12, 1989-90.**

| Grade | Number of Students Tested | Normal Curve Equivalent | | | Performance Standard* Attained |
|---|---|---|---|---|---|
| | | Pre Mean | Post Mean | Mean Gain/ Loss | |
| K | 1 | 32.0 | 28.0 | -4.0 | No |
| 1 | 76 | 32.0 | 42.0 | 10.0 | Yes |
| 2 | 56 | 41.1 | 46.8 | 5.7 | Yes |
| 3 | 55 | 45.4 | 45.2 | -0.2 | No |
| 4 | 58 | 44.0 | 41.4 | -2.6 | No |
| 5 | 47 | 43.8 | 41.5 | -2.3 | No |
| 6 | 48 | 38.7 | 39.9 | 1.2 | Yes |
| 7 | 36 | 41.1 | 38.3 | -2.8 | No |
| 8 | 19 | 38.6 | 37.8 | -0.8 | No |
| 9 | 55 | 36.9 | 39.4 | 2.5 | Yes |
| 10 | 14 | 42.2 | 45.1 | 2.9 | Yes |
| 11 | 6 | 41.0 | 40.6 | -0.4 | No |
| 12 | 2 | 47.0 | 5.5 | -41.5 | No |

*Post-test Normal Curve Equivalent (NCE) score will evidence improvement over pre-test NCE score.

Students tested obtained the performance standard at grades 1, 2, 6, 9 and 10. Grades K, 3, 4, 5, 7, 8, 11 and 12 failed to meet the standard. Thus five of thirteen (38.5%) grades attained the performance standard.

**Mathematics**

Grade level results are presented in Table 4 below.

**TABLE 4. ATTAINMENT OF THE PERFORMANCE STANDARD* IN MATHEMATICS IN TERMS OF NORMAL CURVE EQUIVALENT (NCE) SCORES FOR MIGRANT PROGRAM PARTICIPANTS TESTED SPRING TO SPRING, GRADES K-12, 1989-90.**

| Grade | Number of Students Tested | Normal Curve Equivalent | | | Performance Standard* Attained |
|---|---|---|---|---|---|
| | | Pre Mean | Post Mean | Mean Gain/ Loss | |
| K | 1 | 20.0 | 35.0 | 15.0 | Yes |
| 1 | 79 | 2.4 | 42.0 | 39.6 | Yes |
| 2 | 58 | 41.1 | 46.8 | 5.7 | Yes |
| 3 | 56 | 45.4 | 45.2 | -0.2 | No |
| 4 | 58 | 52.9 | 48.7 | -4.2 | No |
| 5 | 47 | 51.3 | 52.3 | 1.0 | Yes |
| 6 | 48 | 49.8 | 54.0 | 4.2 | Yes |
| 7 | 34 | 61.6 | 51.0 | -10.6 | No |
| 8 | 18 | 46.8 | 47.0 | 0.2 | Yes |
| 9 | 51 | 44.4 | 45.8 | 1.4 | Yes |
| 10 | 16 | 52.5 | 47.9 | -4.6 | No |
| 11 | 6 | 51.8 | 54.6 | 2.8 | Yes |
| 12 | 3 | 75.0 | 11.0 | -64.0 | No |

*Post-test Normal Curve Equivalent (NCE) score will evidence improvement over pre-test NCE score.

Students tested obtained the performance standard at grades K, 1, 2, 5, 6, 8, 9 and 11. Overall eight of the thirteen grades (61.5%) attained the performance standard.

## OVERALL ACHIEVEMENT FOR STATE BILINGUAL AND MIGRANT PROGRAMS

Table 5 below presents in summary form the attainment of the performance standard by program, subject, and grade. As these data indicate, the State Bilingual students attained the performance standard in grades K, 1, 3, 6, 8, 9 and 11 in both subjects; 2 and 4 in reading; and 5 in mathematics. The Migrant program attained the performance standard in grades 1, 2, 6 and 9 in both subjects; 10 in reading; and K, 5, 8 and 11 in mathematics. Overall the State Bilingual program seemed slightly more effective in reading with 69.2% (9 of 13) grades attaining the standard than in mathematics with 61.5% (8 of 13). The Migrant program showed higher performance in mathematics with 61.5% (8 of 13) grade attainments than in reading with 38.5% (5 of 13) grades attaining the standard.

TABLE 5. ATTAINMENT STATUS* FOR READING AND MATHEMATICS BY PROGRAM BY GRADE, 1989-90.

| GRADE LEVEL | STATE BILINGUAL | | MIGRANT | |
|---|---|---|---|---|
| | Reading | Mathematics | Reading | Mathematics |
| K | Yes | Yes | No | Yes |
| 1 | Yes | Yes | Yes | Yes |
| 2 | Yes | No | Yes | Yes |
| 3 | Yes | Yes | No | No |
| 4 | Yes | No | No | No |
| 5 | No | Yes | No | Yes |
| 6 | Yes | Yes | Yes | Yes |
| 7 | No | No | No | No |
| 8 | Yes | Yes | No | Yes |
| 9 | Yes | Yes | Yes | Yes |
| 10 | No | No | Yes | No |
| 11 | Yes | Yes | No | Yes |
| 12 | No | No | No | No |
| Total** | | | | |
| Yes | 9 (69.2%) | 8 (61.5%) | 5 (38.5%) | 8 (61.5%) |
| No | 4 (30.8%) | 5 (38.5%) | 8 (61.5%) | 5 (38.5%) |

*A "yes" attainment status means the average post-test NCE score was greater than the average pre-test NCE score.
**Total frequency distribution of attainment of performance by program and grade.

The achievement results, which have been presented, were also tabulated by building. These data are presented in Appendix D.

## OBJECTIVE LEVEL ACHIEVEMENT FOR STATE BILINGUAL AND MIGRANT PROGRAMS

Table 6 below presents the attainment level of the performance criterion for the elementary reading comprehension objectives by grade.

TABLE 6. SUMMARY OF THE PERCENT OF 1989-90 STATE BILINGUAL/MIGRANT STUDENTS BY GRADE ATTAINING SELECTED CAT READING OBJECTIVES AS COMPARED TO 1988-89 DISTRICT-WIDE ATTAINMENT CRITERION PER GRADE LEVEL.*

| GRADE | NUMBER TESTED | READING OBJECTIVE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 33 Stated Main Idea**/ 36 Central Thought | | | 37 Interpreting Events | | | 39 Writing Techniques | | |
| | | 1989-90 % | 1988-89 % | Criteria Achieved? | 1989-90 % | 1988-89 % | Criteria Achieved? | 1989-90 % | 1988-89 % | Criteria Achieved? |
| 1 | 165 | 36 | 27 | Yes | 32 | 26 | Yes | NA*** | NA | NA |
| 2 | 113 | 64 | 56 | Yes | 59 | 60 | No | NA | NA | NA |
| 3 | 79 | 57 | 63 | No | 63 | 63 | Yes | NA | NA | NA |
| 4 | 77 | 21 | 41 | No | 13 | 56 | No | 46 | 28 | Yes |
| 5 | 60 | 42 | 55 | No | 49 | 51 | No | 32 | 40 | No |
| 6 | 71 | 39 | 58 | No | 49 | 67 | No | 26 | 37 | No |

*State Bilingual/Migrant program participants will equal or exceed district-wide 1988-89 mastery levels per grade.

**Objective 33 (Stated Main Idea) applies only to grade one and Objective 36 (Central Thought) is applicable to grades two through six.

***NA = Not Applicable.

As these data indicate, the combined program participants attained the district-wide criteria across all objectives measured in first grade. The criteria was partially attained in grades 2, 3 and 4 of 1 of 2 objectives (50.0%), 1 of 2 objectives (50.0%), and 1 of 3 objectives (33.3%) respectively. Participants failed to show mastery at district-wide attainment criteria for any of the objectives at grades 5 and 6. Overall the State Bilingual/Migrant students across all reading objectives showed 33.3% (5 of 15) of them attaining the district-wide criteria. Failure to attain the district-wide criterion ranged from a low of 1% (grade 2 - Objective 37 Interpreting Events) to a high of 20% (grade 4 - Objective 36 Central Thought). See Appendix E for the objective attainment results by building and grade.

## SUMMARY

The 1989-90 school year was the eleventh year that students in the State Bilingual and Migrant programs were assessed in reading and mathematics, using a norm referenced test. This is the fourth year that the new California Achievement Test (CAT) Form E/F normed in the Spring of 1985 has been used for program evaluation purposes.

The locally adopted performance standard for the overall program was that grade level post-test mean NCE scores would evidence improvement over pre-test scores.

The State Bilingual results show an increase from the previous year in the percent of grade levels meeting the performance standard in both reading and mathematics. For the State Bilingual program the 32.8% point increase in reading was from 36.4% meeting the standard last year (4 of 11 observations) to 69.2% meeting the same standard this year (9 of 13 observations). The increase of 7.0% points in mathematics was from 54.5% (6 of 15 observations) to 61.5% (8 of 15 observations).

The Migrant results, on the other hand, shows a decrease from the previous year in the percent of grade level meeting the performance standard in reading and an increase in mathematics. The 21.5% point decrease in reading came about from 6 of 10 observations (60.0%) meeting the standard last year to 5 of 13 observations (38.5%) meeting the same standard this year. The 11.5% point increase in mathematics was from 50.0% (5 of 10 observations) meeting the standard last year to 61.5% (8 of 13 observations) meeting the same standard this year.

Overall at some grade levels for both programs only a few students were pre- and post-tested, thus, the scores are perhaps not stable due to the small number of students tested at particular grade levels.

A new evaluative feature this year at the elementary level (grades 1-6) was the use of reading data by objective from CAT to measure progress. Three key reading objectives (main idea, interpreting events, and writing techniques) were to be mastered at equal or higher levels than district-wide 1988-89 mastery levels. This criteria seemed reasonable because all instructional time in grades 1-6 of State Bilingual/Migrant participants was focused upon these three objectives or upon enabling objectives related to the three objectives. Overall the State Bilingual/Migrant students across all three reading objectives showed 33.3% (5 of 15 observations) mastery of the district-wide criteria.

The recommendations that follow are based upon process and product evaluation results.

## RECOMMENDATIONS

Based on this year's process and product evaluation results, the following recommendations are offered in an effort to improve the implementation of the State Bilingual/Migrant programs for the 1990-91 school year.

1. Reduce variations in the program between building sites by having the supervisor and State Bilingual/Migrant staff analyze the building results presented in Appendix D and E. Hopefully, a plan can be formulated to reduce (or control) these variations in program impact.

2. Increased monitoring of a number of program functions by the program supervisor seems essential. These functions include:

   -- Scheduling conflicts,
   -- Record keeping at both instructional and support service sites,
   -- Classroom instructional practices,
   -- Pupil absenteeism, and
   -- Caseloads of staff.

3. Explore other alternatives to lower the student to staff ratios and to make those more consistent across buildings. Present funding levels make it impossible to lower the ratio further without assistance from other sources.

4. Continue to plan and define at the secondary level a consistent advisor program where like services are provided at all secondary buildings to eligible students. Elements to consider should include the following:

   - It should be explored and further defined as to whether the advisor will provide college, personal, individual tutoring, parent conferences, and discipline problem work in addition to their major function of attendance and curriculum advising.

   - Program supervisor and staff should determine whether a schedule or no schedule of activities for the advisors is more effective and productive. Some standardized procedures hopefully will result for the advisor program at the secondary level.

- Explore developing a common set of materials and processes for group advising in the following areas:

    -- Benefit of schooling/college information
    -- Drug use
    -- Attendance
    -- Programs in school
    — Developing coping skills
    -- Strengthening self-confidence
    — Learning social graces
    -- Learning team processes

- In order to insure our ability to demonstrate service, advisors should be required to keep up-to-date with student census forms and teacher contact forms.

5. Develop a technique or set of procedures to insure the provision of regular communication of both instructional and advisor staff with classroom and compensatory education teaching staff.

6. Record building level instructional activities that happen monthly. These activities then should be communicated through a calendar of events from each teacher to the supervisor.

7. To overcome start of the year scheduling conflicts, the effected staff member should work with the program supervisor to deal with them as they occur.

8. In order to help parents deal with home and school problems, the program supervisor should institute more parent related activities during the course of the school year. A regular planned program should be outlined to parents at the beginning of the school year.

APPENDICES

## APPENDIX A

### 1989-90 COUNT OF PROGRAM PARTICIPANTS*

**PROGRAM:** State Bilingual, Total Participants*

| Building | K | 1 | 2 | 3 | 4 | 5 | 6 | Total |
|---|---|---|---|---|---|---|---|---|
| E. Baillie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coulter | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 5 |
| Emerson | 5 | 10 | 5 | 1 | 1 | 1 | 0 | 23 |
| Fuerbringer | 9 | 10 | 7 | 1 | 0 | 1 | 0 | 28 |
| N. Haley | 3 | 8 | 1 | 2 | 1 | 1 | 0 | 16 |
| Handley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavenrich | 3 | 5 | 2 | 2 | 0 | 0 | 0 | 12 |
| Herig | 9 | 11 | 5 | 0 | 0 | 0 | 5 | 30 |
| Houghton | 5 | 8 | 1 | 0 | 0 | 0 | 1 | 15 |
| Jerome | 16 | 18 | 7 | 2 | 2 | 1 | 6 | 52 |
| Jones | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 6 |
| Kempton | 4 | 4 | 3 | 3 | 4 | 0 | 0 | 18 |
| Longfellow | 15 | 11 | 5 | 2 | 2 | 1 | 3 | 39 |
| Longstreet | 4 | 6 | 4 | 0 | 0 | 0 | 0 | 14 |
| J. Loomis | 7 | 12 | 5 | 0 | 1 | 2 | 1 | 28 |
| Merrill Park | 10 | 13 | 6 | 1 | 0 | 1 | 0 | 31 |
| C. Miller | 4 | 3 | 2 | 0 | 2 | 0 | 0 | 11 |
| J. Moore | 15 | 20 | 7 | 2 | 1 | 0 | 7 | 52 |
| Morley | 1 | 1 | 3 | 1 | 0 | 0 | 1 | 7 |
| J. Rouse | 22 | 28 | 8 | 1 | 0 | 0 | 1 | 60 |
| Salina | 5 | 5 | 3 | 2 | 1 | 1 | 2 | 19 |
| Stone | 19 | 22 | 6 | 1 | 2 | 0 | 1 | 51 |
| Webber Ele. | 20 | 16 | 8 | 2 | 0 | 2 | 6 | 54 |
| Zilwaukee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 178 | 219 | 89 | 23 | 17 | 11 | 34 | 571 |

*Count as of January 15, 1990 computer run prior to February tracking.

## APPENDIX A

### 1989-90 COUNT OF PROGRAM PARTICIPANTS*

**PROGRAM:** Migrant, Total Participants

| Building | K | 1 | 2 | 3 | 4 | 5 | 6 | Total |
|---|---|---|---|---|---|---|---|---|
| E. Baillie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coulter | 1 | 3 | 3 | 1 | 1 | 2 | 0 | 11 |
| Emerson | 3 | 8 | 5 | 7 | 5 | 1 | 1 | 30 |
| Fuerbringer | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 7 |
| N. Haley | 2 | 5 | 7 | 5 | 7 | 4 | 2 | 32 |
| Handley | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavenrich | 2 | 1 | 2 | 2 | 0 | 1 | 1 | 9 |
| Herig | 4 | 2 | 6 | 2 | 2 | 2 | 5 | 23 |
| Houghton | 3 | 6 | 3 | 2 | 1 | 1 | 4 | 20 |
| Jerome | 2 | 4 | 2 | 2 | 2 | 5 | 2 | 19 |
| Jones | 0 | 3 | 2 | 5 | 4 | 3 | 4 | 21 |
| Kempton | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 3 |
| Longfellow | 4 | 2 | 5 | 6 | 3 | 4 | 5 | 29 |
| Longstreet | 2 | 3 | 2 | 1 | 2 | 1 | 0 | 11 |
| J. Loomis | 5 | 10 | 4 | 5 | 9 | 6 | 5 | 44 |
| Merrill Park | 2 | 0 | 1 | 1 | 3 | 2 | 1 | 10 |
| C. Miller | 2 | 0 | 2 | 1 | 2 | 2 | 2 | 11 |
| J. Moore | 4 | 4 | 2 | 1 | 2 | 2 | 2 | 17 |
| Morley | 2 | 0 | 2 | 1 | 1 | 2 | 0 | 8 |
| J. Rouse | 8 | 11 | 11 | 17 | 6 | 6 | 11 | 70 |
| Salina | 2 | 1 | 1 | 2 | 3 | 0 | 0 | 9 |
| Stone | 8 | 10 | 4 | 2 | 6 | 4 | 3 | 37 |
| Webber Ele. | 14 | 13 | 12 | 9 | 8 | 11 | 9 | 76 |
| Zilwaukee | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 70 | 89 | 78 | 74 | 69 | 59 | 58 | 497 |

*Count as of January 15, 1990 computer run prior to February tracking.

## APPENDIX A

### 1989-90 COUNT OF PROGRAM PARTICIPANTS*

**PROGRAM: State Bilingual, Total Participants**

| Building | 7 | 8 | 9 | Total |
|---|---|---|---|---|
| Central Junior | 0 | 1 | 2 | 3 |
| North Intermediate | 8 | 8 | 15 | 31 |
| South Intermediate | 12 | 11 | 11 | 34 |
| Webber Junior | 6 | 4 | 11 | 21 |
| TOTAL | 26 | 24 | 39 | 89 |

*Count as of January 15, 1990 computer run prior to February tracking.

### 1989-90 COUNT OF PROGRAM PARTICIPANTS*

**PROGRAM: State Bilingual Total Participants**

| Building | 10 | 11 | 12 | Total |
|---|---|---|---|---|
| Arthur Hill | 10 | 9 | 21 | 40 |
| Saginaw High | 5 | 2 | 2 | 9 |
| TOTAL | 15 | 11 | 23 | 49 |

*Count as of January 15, 1990 computer run prior to February tracking.

## APPENDIX A

### 1989-90 COUNT OF PROGRAM PARTICIPANTS*

**PROGRAM: Migrant, Total Participants**

| Building | 7 | 8 | 9 | Total |
|---|---|---|---|---|
| Central Junior | 7 | 6 | 7 | 20 |
| North Intermediate | 20 | 13 | 29 | 62 |
| South Intermediate | 12 | 16 | 23 | 51 |
| Webber Junior | 11 | 11 | 24 | 46 |
| TOTAL | 50 | 46 | 83 | 179 |

*Count as of January 15, 1990 computer run prior to February tracking.

### 1989-90 COUNT OF PROGRAM PARTICIPANTS*

**PROGRAM: Migrant, Total Participants**

| Building | 10 | 11 | 12 | Total |
|---|---|---|---|---|
| Arthur Hill | 40 | 23 | 16 | 79 |
| Saginaw High | 10 | 7 | 3 | 20 |
| TOTAL | 50 | 30 | 19 | 99 |

*Count as of January 15, 1990 computer run prior to February tracking.

## APPENDIX B

## IDENTIFICATION AND ELIGIBILITY PROCEDURES FOR STATE BILINGUAL AND MIGRANT STUDENTS

### State Bilingual

The first step in the procedures is that of a student identification. Potential students are identified by means of a Home Language Survey. The survey is designed to determine if: 1) the native or first language is other than English or; 2) a language other than English is regularly used in the student's home or environment. Students in grades K-2 eligible for the program on the basis of the Home Language Survey and parental permission. Students in grades 3-12 go through a more extensive eligibility system which is described below.

In addition to the Home Language Survey, students in grades 3-12 are also tested on one or two instruments for program eligibility. For students who are new or have never been in the Bilingual program, the first is a test of oral English proficiency. In Saginaw, the Language Assessment Battery (LAB) test is used for this purpose and is usually administered in the fall of each year. If the student scores at or below the 40th percentile, then the student is eligible. However, if the student scores above the 40th percentile, then the student is given an English reading achievement test. The California Achievement Test (CAT) is used for this purpose. If the student scores at or below the 40th percentile, then the student is eligible for the program. Finally, parental permission is needed for program participation.

## APPENDIX B

Students in grades 3-12 who were in the Bilingual program the previous year go through a somewhat different eligibility procedure. These students are subject to a program exit criterion which is based on the student's post-test English reading achievement score. If the student's post-test score remains at or below the 40th percentile, the student is ineligible. However, eligibility is based on either the oral English language proficiency test score or the English reading achievement test score. In addition, a score that is used for eligibility is to be the result of a test administration no earlier than the spring of the preceding school year. It is, therefore, possible for a student to exceed the 40th percentile on the reading achievement test and become eligible when retested with the oral English proficiency test. The final eligibility requirement is that students:

> ... shall be enrolled in the Bilingual instruction program for three years or until the child achieves a level of proficiency in English language skills sufficient to receive an equal educational opportunity in the regular school program, whichever comes first.[1]

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[1] Administrator's Manual for Bilingual Education Programs in Michigan 1979-80 Bilingual Education Office, Michigan Department of Education, February, 1979, Appendix A, page 4.

## APPENDIX B

**Migrant**

Eligibility for the Migrant program is based solely on whether a student is one of three Migrant designations. The district does, however, attempt to serve those students with the greatest academic need, and nearly all Migrant students scored at or below the 40th percentile on an English reading achievement test.

The three designations of Migrant students are:

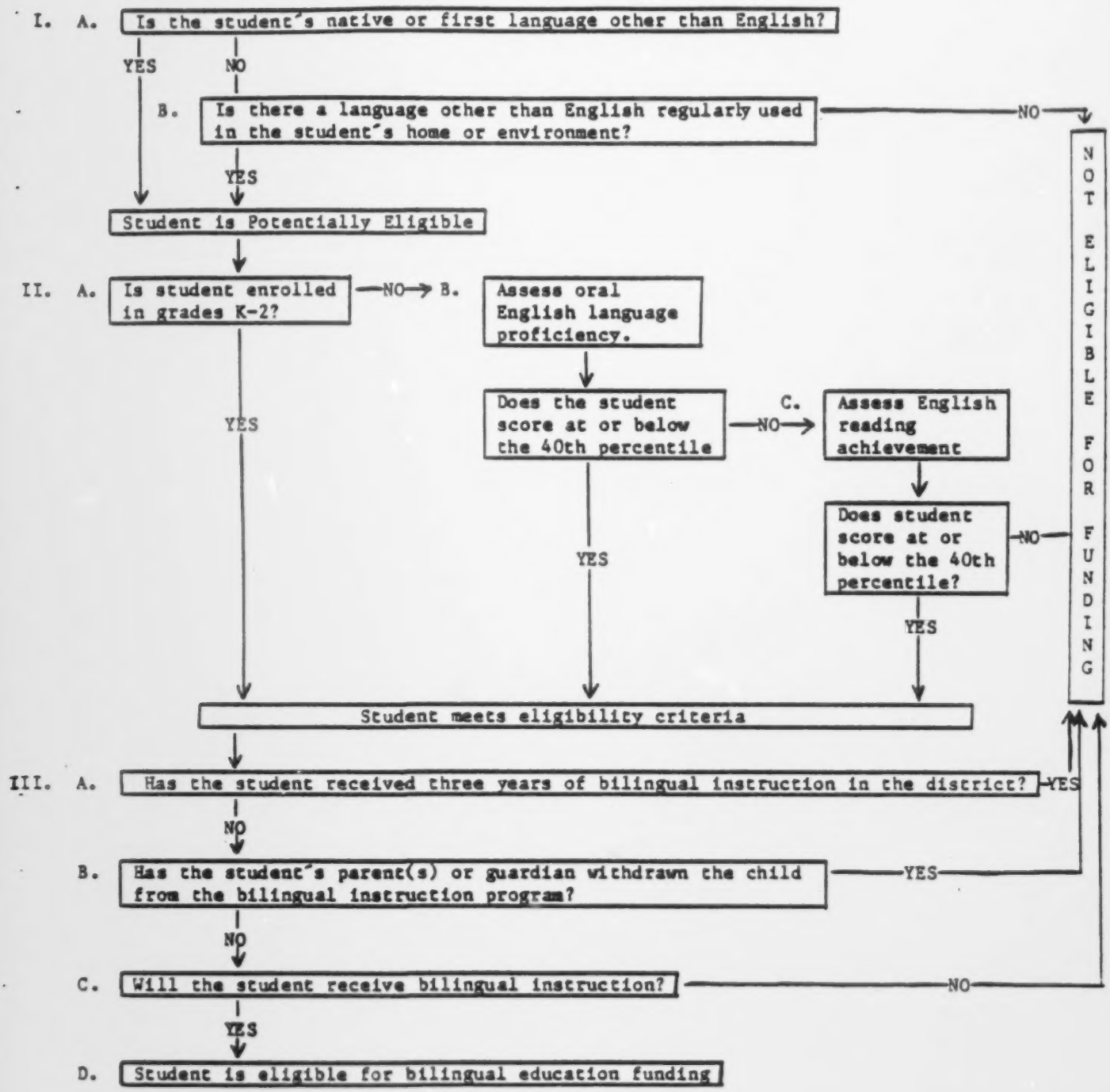
1) Interstate: Student has moved within the last year across state boundaries.

2) Intrastate: Student has moved within the last year across school district boundaries within the state.

3) Five Year Settled Out: Student has remained within a school district for at least five years.

APPENDIX B

PROCEDURES FOR THE IDENTIFICATION OF STUDENTS ELIGIBLE FOR BILINGUAL EDUCATION FUNDING SUMMARY FLOW CHART


I. A. Is the student's native or first language other than English?
YES
NO
B. Is there a language other than English regularly used in the student's home or environment?
NO
YES
Student is Potentially Eligible
II. A. Is student enrolled in grades K-2?
NO
B. Assess oral English language proficiency.
YES
Does the student score at or below the 40th percentile
C. NO
Assess English reading achievement
Does student score at or below the 40th percentile?
NO
YES
YES
NOT ELIGIBLE FOR FUNDING
Student meets eligibility criteria
III. A. Has the student received three years of bilingual instruction in the district?
YES
NO
B. Has the student's parent(s) or guardian withdrawn the child from the bilingual instruction program?
YES
NO
C. Will the student receive bilingual instruction?
NO
YES
D. Student is eligible for bilingual education funding

APPENDIX C

SCHOOL DISTRICT OF THE CITY OF SAGINAW

DEPARTMENT OF EVALUATION, TESTING & RESEARCH

TO: Raul A. Rio

FROM: Richard N. Claus

RE: CAT Objectives Mastery Standard For State Bilingual/Migrant Program

DATE: April 4, 1990

As per our agreement today, the State Bilingual/Migrant Program will equal or exceed district-wide Spring, 1989 mastery levels on selected CAT objectives as part of the data reported internally. These mastery levels are given in the chart below.

| CAT Reading Objectives | Percentage Mastery By Grade 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 33/36 | 27 | 56 | 63 | 41 | 55 | 58 |
| 37 | 26 | 60 | 63 | 56 | 51 | 67 |
| 39 | | | | 28 | 40 | 37 |

RNC/gal

cc: Barry E. Quimper

## APPENDIX D

TABLE D.1. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING AND GRADE FOR ALL STATE BILINGUAL PUPILS IN READING BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| BUILDING | GRADE K | | | | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| E. Baillie | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Coulter | 0 | -- | -- | -- | 4 | 24.2 | 44.0 | 19.8 | 1 | 28.0 | 38.0 | 10.0 | 0 | -- | -- | -- | 1 | 42.0 | 44.0 | 2.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Emerson | 0 | -- | -- | -- | 9 | 36.1 | 30.6 | -5.5 | 5 | 33.0 | 57.2 | 24.2 | 1 | 31.0 | 40.0 | 9.0 | 1 | 18.0 | 32.0 | 14.0 | 1 | 31.0 | 26.0 | -5.0 | 1 | 38.0 | 36.0 | -2.0 |
| Fuerbringer | 1 | 91.0 | 76.0 | -15.0 | 8 | 50.7 | 48.6 | -2.1 | 7 | 54.7 | 55.1 | 0.4 | 1 | 40.0 | 53.0 | 13.0 | 0 | -- | -- | -- | 1 | 37.0 | 33.0 | -4.0 | 0 | -- | -- | -- |
| Nelle Haley | 0 | -- | -- | -- | 7 | 23.0 | 52.1 | 29.1 | 0 | -- | -- | -- | 2 | 35.0 | 29.5 | -5.5 | 0 | -- | -- | -- | 1 | 33.0 | 38.0 | 5.0 | 0 | -- | -- | -- |
| Handley | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Heavenrich | 0 | -- | -- | -- | 4 | 34.5 | 44.7 | 10.2 | 1 | 47.0 | 64.0 | 17.0 | 2 | 26.5 | 29.0 | 2.5 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Herig | 0 | -- | -- | -- | 11 | 42.7 | 51.7 | 9.0 | 3 | 61.7 | 46.3 | -15.4 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 3 | 29.3 | 34.0 | 4.7 |
| Houghton | 0 | -- | -- | -- | 6 | 36.6 | 38.0 | 1.4 | 2 | 45.5 | 54.0 | 8.5 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 36.0 | 25.0 | -11.0 |
| Jerome | 0 | -- | -- | -- | 20 | 47.9 | 48.7 | 0.8 | 7 | 40.1 | 54.8 | 14.7 | 2 | 40.5 | 49.5 | 9.0 | 1 | 41.0 | 45.0 | 4.0 | 0 | -- | -- | -- | 6 | 35.3 | 29.1 | -6.2 |
| Jones | 0 | -- | -- | -- | 2 | 41.5 | 18.0 | -23.5 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Kempton | 0 | -- | -- | -- | 4 | 53.7 | 54.7 | 1.0 | 3 | 72.6 | 51.3 | -21.3 | 2 | 34.5 | 45.5 | 11.0 | 3 | 41.0 | 36.3 | -4.7 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Longfellow | 0 | -- | -- | -- | 8 | 31.8 | 40.6 | 8.8 | 6 | 31.6 | 41.0 | 9.4 | 1 | 41.0 | 59.0 | 18.0 | 2 | 34.5 | 50.5 | 16.0 | 1 | 44.0 | 47.0 | 3.0 | 3 | 37.3 | 38.6 | 1.3 |
| Longstreet | 0 | -- | -- | -- | 3 | 33.3 | 49.0 | 15.7 | 1 | 32.0 | 32.0 | 0.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| J. Loomis | 0 | -- | -- | -- | 8 | 28.1 | 42.1 | 14.0 | 2 | 14.0 | 37.0 | 23.0 | 0 | -- | -- | -- | 1 | 36.0 | 22.0 | -14.0 | 2 | 42.0 | 38.0 | -4.0 | 1 | 29.0 | 32.0 | 3.0 |
| M. Park | 0 | -- | -- | -- | 10 | 44.4 | 39.5 | -4.9 | 5 | 23.4 | 33.2 | 9.8 | 1 | 26.0 | 29.0 | 3.0 | 0 | -- | -- | -- | 1 | 43.0 | 45.0 | 2.0 | 0 | -- | -- | -- |
| C. Miller | 0 | -- | -- | -- | 3 | 34.3 | 47.0 | 12.7 | 1 | 27.0 | 53.0 | 26.0 | 0 | -- | -- | -- | 2 | 33.5 | 29.0 | -4.5 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| J. Moore | 2 | 30.0 | 63.5 | 33.5 | 13 | 40.2 | 45.8 | 5.6 | 6 | 35.8 | 35.5 | -0.3 | 2 | 26.5 | 26.5 | 0.0 | 1 | 25.0 | 28.0 | 3.0 | 0 | -- | -- | -- | 7 | 33.5 | 35.0 | 1.5 |
| Morley | 0 | -- | -- | -- | 3 | 24.0 | 47.3 | 23.3 | 1 | 24.0 | 0.0 | -24.0 | 1 | 36.0 | 55.0 | 19.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| J. Rouse | 2 | 47.5 | 58.0 | 10.5 | 20 | 34.2 | 37.3 | 3.1 | 6 | 44.3 | 49.8 | 5.5 | 1 | 41.0 | 46.0 | 5.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 24.0 | 25.0 | 1.0 |
| Salina | 1 | 1.0 | 1.0 | 0.0 | 3 | 28.0 | 42.3 | 14.3 | 2 | 49.0 | 23.0 | -26.0 | 2 | 34.0 | 46.5 | 12.5 | 1 | 36.0 | 32.0 | -4.0 | 1 | 39.0 | 35.0 | -4.0 | 2 | 43.0 | 53.0 | 10.0 |
| Stone | 1 | 32.0 | 28.0 | -4.0 | 15 | 32.8 | 37.8 | 5.0 | 4 | 47.2 | 52.2 | 5.0 | 1 | 26.0 | 29.0 | 3.0 | 2 | 34.5 | 54.5 | 20.0 | 0 | -- | -- | -- | 1 | 37.0 | 38.0 | 1.0 |
| Webber Ele. | 0 | -- | -- | -- | 16 | 24.8 | 46.6 | 21.8 | 6 | 41.1 | 48.8 | 7.7 | 1 | 35.0 | 44.0 | 9.0 | 0 | -- | -- | -- | 2 | 34.5 | 31.5 | -3.0 | 4 | 36.5 | 36.2 | -0.3 |
| Zilwaukee | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| TOTAL | 7 | 39.8 | 49.7 | 9.9 | 177 | 36.4 | 43.5 | 7.1 | 69 | 41.0 | 46.2 | 5.2 | 20 | 33.5 | 40.4 | 6.9 | 15 | 35.0 | 38.6 | 3.6 | 10 | 38.0 | 36.3 | -1.7 | 30 | 34.7 | 34.8 | 0.1 |

TABLE D.2. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING AND GRADE FOR ALL K-6 STATE BILINGUAL PUPILS IN MATHEMATICS BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| BUILDING | GRADE K | | | | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| E. Baillie | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Coulter | 0 | -- | -- | -- | 4 | 24.7 | 51.2 | 26.5 | 1 | 79.0 | 61.0 | -18.0 | 0 | -- | -- | -- | 1 | 26.0 | 36.0 | 10.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Emerson | 0 | -- | -- | -- | 9 | 32.0 | 34.5 | 2.5 | 5 | 54.8 | 53.2 | -1.6 | 1 | 18.0 | 1.0 | -17.0 | 1 | 42.0 | 50.0 | 8.0 | 1 | 35.0 | 32.0 | -3.0 | 1 | 46.0 | 46.0 | 0.0 |
| Fuerbringer | 1 | 76.0 | 53.0 | -23.0 | 8 | 42.3 | 51.5 | 9.2 | 7 | 65.5 | 56.0 | -9.5 | 1 | 71.0 | 80.0 | 9.0 | 0 | -- | -- | -- | 1 | 43.0 | 44.0 | 1.0 | 0 | -- | -- | -- |
| Nelle Haley | 0 | -- | -- | -- | 7 | 36.2 | 69.0 | 32.8 | 0 | -- | -- | -- | 2 | 34.5 | 29.5 | -5.0 | 0 | -- | -- | -- | 1 | 41.0 | 56.0 | 15.0 | 0 | -- | -- | -- |
| Handley | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Heavenrich | 0 | -- | -- | -- | 4 | 44.0 | 62.5 | 18.5 | 1 | 76.0 | 62.0 | -14.0 | 2 | 19.0 | 23.0 | 4.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Herig | 0 | -- | -- | -- | 11 | 41.6 | 59.5 | 17.9 | 3 | 76.0 | 69.0 | -7.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 3 | 41.3 | 56.3 | 15.0 |
| Houghton | 0 | -- | -- | -- | 6 | 43.3 | 60.3 | 17.0 | 2 | 42.0 | 30.5 | -11.5 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 50.0 | 51.0 | 1.0 |
| Jerome | 0 | -- | -- | -- | 20 | 46.9 | 49.5 | 2.6 | 7 | 62.5 | 70.7 | 8.2 | 2 | 62.0 | 57.0 | -5.0 | 1 | 58.0 | 46.0 | -12.0 | 0 | -- | -- | -- | 6 | 45.0 | 32.5 | -12.5 |
| Jones | 0 | -- | -- | -- | 2 | 68.5 | 64.5 | -4.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Kempton | 0 | -- | -- | -- | 4 | 54.0 | 66.0 | 12.0 | 3 | 77.3 | 54.0 | -23.3 | 2 | 34.0 | 53.0 | 19.0 | 3 | 55.6 | 38.6 | -17.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Longfellow | 0 | -- | -- | -- | 8 | 29.8 | 50.6 | 20.8 | 6 | 50.8 | 44.8 | -6.0 | 1 | 25.0 | 31.0 | 6.0 | 2 | 32.5 | 63.5 | 31.0 | 1 | 44.0 | 49.0 | 5.0 | 3 | 46.6 | 41.3 | -5.3 |
| Longstreet | 0 | -- | -- | -- | 3 | 20.0 | 35.3 | 15.3 | 1 | 43.0 | 47.0 | 4.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| J. Loomis | 0 | -- | -- | -- | 8 | 32.3 | 52.5 | 20.2 | 2 | 23.0 | 41.0 | 18.0 | 0 | -- | -- | -- | 1 | 38.0 | 26.0 | -12.0 | 2 | 68.0 | 52.5 | -15.5 | 1 | 30.0 | 22.0 | -8.0 |
| M. Park | 0 | -- | -- | -- | 10 | 43.5 | 50.1 | 6.6 | 5 | 50.4 | 42.0 | -8.4 | 1 | 41.0 | 44.0 | 3.0 | 0 | -- | -- | -- | 1 | 69.0 | 72.0 | 3.0 | 0 | -- | -- | -- |
| C. Miller | 0 | -- | -- | -- | 3 | 27.6 | 53.6 | 26.0 | 1 | 38.0 | 34.0 | -4.0 | 0 | -- | -- | -- | 2 | 51.5 | 48.0 | -3.5 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| J. Moore | 2 | 27.5 | 51.5 | 24.0 | 13 | 39.0 | 55.3 | 16.3 | 6 | 57.0 | 41.3 | -15.7 | 2 | 23.0 | 35.5 | 12.5 | 1 | 42.0 | 23.0 | -19.0 | 0 | -- | -- | -- | 7 | 45.0 | 52.0 | 7.0 |
| Morley | 0 | -- | -- | -- | 3 | 38.6 | 61.0 | 22.4 | 1 | 22.0 | 17.0 | -5.0 | 1 | 47.0 | 75.0 | 28.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| J. Rouse | 2 | 47.0 | 53.0 | 6.0 | 20 | 29.2 | 46.5 | 17.3 | 6 | 53.1 | 59.1 | 6.0 | 1 | 36.0 | 49.0 | 13.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 45.0 | 56.0 | 11.0 |
| Salina | 1 | 1.0 | 10.0 | 9.0 | 3 | 37.6 | 43.3 | 5.7 | 2 | 39.0 | 66.0 | 27.0 | 2 | 39.5 | 42.5 | 3.0 | 1 | 53.0 | 37.0 | -16.0 | 1 | 49.0 | 55.0 | 6.0 | 2 | 48.0 | 58.5 | 10.5 |
| Stone | 1 | 20.0 | 35.0 | 15.0 | 15 | 40.2 | 47.1 | 6.9 | 4 | 57.7 | 50.2 | -7.5 | 1 | 25.0 | 49.0 | 24.0 | 2 | 53.0 | 46.0 | -7.0 | 0 | -- | -- | -- | 1 | 65.0 | 70.0 | 5.0 |
| Webber Ele. | 0 | -- | -- | -- | 16 | 39.1 | 58.8 | 19.7 | 6 | 46.0 | 56.5 | 10.5 | 1 | 30.0 | 26.0 | -4.0 | 0 | -- | -- | -- | 2 | 29.0 | 39.0 | 10.0 | 4 | 41.2 | 35.7 | -5.5 |
| Zilwaukee | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| TOTAL | 7 | 35.1 | 43.8 | 8.7 | 177 | 38.3 | 52.3 | 14.0 | 69 | 55.7 | 52.9 | -2.8 | 20 | 36.2 | 41.8 | 5.6 | 15 | 46.6 | 43.2 | -3.4 | 10 | 47.5 | 49.1 | 1.6 | 30 | 44.8 | 45.2 | 0.4 |

TABLE D.3. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING FOR ALL 7-9 STATE BILINGUAL STUDENTS IN READING AND MATHEMATICS BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| Subject/ School | GRADE 7 | | | | GRADE 8 | | | | GRADE 9 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| READING | | | | | | | | | | | | |
| Central Jr. | 1 | 29.0 | 27.0 | -2.0 | 1 | 29.0 | 44.0 | 15.0 | 2 | 33.0 | 31.0 | -2.0 |
| North Int. | 7 | 23.5 | 21.5 | -2.0 | 5 | 32.2 | 32.6 | 0.4 | 12 | 32.4 | 34.7 | 2.3 |
| South Int. | 9 | 36.6 | 37.6 | 1.0 | 8 | 37.6 | 36.5 | -1.1 | 12 | 32.2 | 36.0 | 3.8 |
| Webber Jr. | 5 | 35.0 | 34.8 | -0.2 | 3 | 39.0 | 42.0 | 3.0 | 9 | 26.2 | 28.6 | 2.4 |
| System | 22 | 31.7 | 31.4 | -0.3 | 17 | 35.7 | 36.7 | 1.0 | 35 | 30.8 | 33.4 | 2.6 |
| MATHEMATICS | | | | | | | | | | | | |
| Central Jr. | 1 | 37.0 | 44.0 | 7.0 | 1 | 40.0 | 38.0 | -2.0 | 2 | 41.0 | 41.0 | 0.0 |
| North Int. | 7 | 54.0 | 44.1 | -9.9 | 5 | 38.4 | 41.2 | 2.8 | 12 | 52.1 | 52.5 | 0.4 |
| South Int. | 9 | 46.7 | 45.5 | -1.2 | 8 | 40.3 | 41.5 | 1.2 | 12 | 35.1 | 34.0 | -1.1 |
| Webber Jr. | 5 | 39.4 | 42.4 | 3.0 | 3 | 48.6 | 52.0 | 3.4 | 9 | 25.2 | 37.5 | 12.3 |
| System | 22 | 46.9 | 44.3 | -2.6 | 17 | 41.2 | 43.0 | 1.8 | 35 | 38.7 | 41.6 | 2.9 |

TABLE D.4. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING FOR ALL 10-12 STATE BILINGUAL STUDENTS IN READING AND MATHEMATICS BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| Subject/ School | GRADE 10 | | | | GRADE 11 | | | | GRADE 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Gain | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| READING | | | | | | | | | | | | |
| Arthur Hill | 11 | 29.0 | 19.9 | -9.1 | 6 | 11.3 | 24.0 | 12.7 | 4 | 38.2 | 3.2 | -35.0 |
| Saginaw High | 2 | 29.5 | 26.5 | -3.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| System | 13 | 29.0 | 20.9 | -8.1 | 6 | 11.3 | 24.0 | 12.7 | 4 | 38.2 | 3.2 | -35.0 |
| MATHEMATICS | | | | | | | | | | | | |
| Arthur Hill | 11 | 37.7 | 20.0 | -17.7 | 6 | 23.0 | 41.0 | 18.0 | 3 | 54.3 | 3.0 | -51.3 |
| Saginaw High | 2 | 25.5 | 23.0 | -2.5 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| System | 13 | 35.8 | 20.4 | -15.4 | 6 | 23.0 | 41.0 | 18.0 | 3 | 54.3 | 3.0 | -51.3 |

## APPENDIX D

TABLE D.5. MEAN NORMAL CURVE EUIVALENT GAIN BY BUILDING AND GRADE FOR ALL M-G MIGRANT PUPILS IN READING BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| BUILDING | GRADE K | | | | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| E. Battle | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Coulter | 0 | -- | -- | -- | 3 | 34.6 | 45.6 | 11.0 | 3 | 32.6 | 43.3 | 10.7 | 1 | 32.0 | 34.0 | 2.0 | 1 | 37.0 | 40.0 | 3.0 | 2 | 49.0 | 56.0 | 7.0 | 0 | -- | -- | -- |
| Emerson | 0 | -- | -- | -- | 5 | 23.4 | 37.2 | 13.8 | 4 | 31.7 | 45.0 | 13.3 | 4 | 40.2 | 52.7 | 12.5 | 4 | 46.5 | 35.5 | -11.0 | 1 | 31.0 | 26.0 | -5.0 | 1 | 50.0 | 52.0 | 2.0 |
| Fuerbringer | 0 | -- | -- | -- | 2 | 57.5 | 72.0 | 14.5 | 2 | 57.5 | 58.5 | 1.0 | 2 | 49.0 | 55.0 | 6.0 | 1 | 37.0 | 35.0 | -2.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Nellie Haley | 0 | -- | -- | -- | 4 | 40.2 | 36.7 | -3.5 | 4 | 61.0 | 52.7 | -8.3 | 4 | 40.0 | 41.7 | 1.7 | 6 | 56.3 | 44.7 | -11.6 | 4 | 40.0 | 42.5 | 2.5 | 2 | 47.5 | 43.0 | -4.5 |
| Handley | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Heavenrich | 0 | -- | -- | -- | 1 | 48.0 | 10.0 | -38.0 | 1 | 47.0 | 64.0 | 17.0 | 1 | 79.0 | 70.0 | -9.0 | 0 | -- | -- | -- | 1 | 50.0 | 62.0 | 12.0 | 1 | 40.0 | 42.0 | 2.0 |
| Herig | 0 | -- | -- | -- | 3 | 23.6 | 48.6 | 25.0 | 5 | 55.6 | 32.6 | -23.0 | 2 | 68.5 | 61.0 | -7.5 | 1 | 39.0 | 45.0 | 6.0 | 1 | 62.0 | 57.0 | -5.0 | 3 | 29.3 | 34.0 | 4.7 |
| Houghton | 0 | -- | -- | -- | 5 | 33.8 | 40.0 | 6.2 | 3 | 44.6 | 44.3 | -0.3 | 2 | 39.0 | 44.0 | 5.0 | 1 | 73.0 | 66.0 | -7.0 | 1 | 43.0 | 47.0 | 4.0 | 3 | 37.3 | 31.7 | -5.6 |
| Jerome | 0 | -- | -- | -- | 5 | 39.0 | 52.6 | 13.6 | 2 | 37.0 | 52.5 | 15.5 | 1 | 38.0 | 48.0 | 10.0 | 1 | 25.0 | 7.0 | -18.0 | 3 | 43.6 | 36.3 | -7.3 | 2 | 36.5 | 32.0 | -4.5 |
| Jones | 0 | -- | -- | -- | 2 | 53.5 | 4.0 | -49.5 | 0 | -- | -- | -- | 4 | 43.7 | 40.5 | -3.2 | 3 | 37.3 | 25.0 | -12.3 | 3 | 41.0 | 17.0 | -24.0 | 4 | 43.5 | 46.7 | 3.2 |
| Kempton | 0 | -- | -- | -- | 1 | 53.0 | 52.0 | -1.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 41.0 | 40.0 | -1.0 | 0 | -- | -- | -- | 1 | 26.0 | 34.0 | 8.0 |
| Longfellow | 0 | -- | -- | -- | 2 | 35.0 | 16.5 | -18.5 | 3 | 33.6 | 41.6 | 8.0 | 5 | 40.2 | 39.0 | -1.2 | 4 | 26.5 | 41.7 | 15.2 | 3 | 40.0 | 38.7 | -1.3 | 3 | 42.0 | 44.0 | 2.0 |
| Longstreet | 0 | -- | -- | -- | 2 | 33.0 | 46.0 | 13.0 | 1 | 60.0 | 39.0 | -21.0 | 1 | 73.0 | 71.0 | -2.0 | 0 | -- | -- | -- | 1 | 44.0 | 48.0 | 4.0 | 0 | -- | -- | -- |
| J. Loomis | 0 | -- | -- | -- | 6 | 32.0 | 33.5 | 1.5 | 3 | 39.3 | 47.6 | 8.3 | 3 | 45.0 | 34.3 | -10.7 | 7 | 28.9 | 31.0 | 2.1 | 4 | 37.5 | 36.5 | -1.0 | 5 | 36.4 | 44.6 | 8.2 |
| M. Park | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 8.0 | 33.0 | 25.0 | 1 | 25.0 | 24.0 | -1.0 | 3 | 57.3 | 51.3 | -6.0 | 2 | 64.5 | 58.0 | -6.5 | 0 | -- | -- | -- |
| G. Miller | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 57.0 | 75.0 | 18.0 | 1 | 76.0 | 34.0 | -42.0 | 2 | 45.0 | 37.5 | -7.5 | 2 | 33.0 | 32.5 | -0.5 | 1 | 47.0 | 52.0 | 5.0 |
| J. Moore | 0 | -- | -- | -- | 3 | 24.0 | 56.3 | 32.3 | 4 | 23.2 | 22.7 | -0.5 | 1 | 39.0 | 29.0 | -10.0 | 3 | 39.6 | 49.0 | 9.4 | 1 | 47.0 | 39.0 | -8.0 | 3 | 27.6 | 26.3 | -1.3 |
| Morley | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 10.0 | 19.0 | 9.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 18.0 | 20.0 | 2.0 | 0 | -- | -- | -- |
| J. Rouse | 0 | -- | -- | -- | 11 | 28.0 | 40.9 | 12.9 | 7 | 46.8 | 57.8 | 11.0 | 9 | 42.3 | 44.6 | 2.3 | 5 | 58.2 | 51.4 | -6.8 | 5 | 48.8 | 50.4 | 1.6 | 9 | 36.4 | 36.7 | 0.3 |
| Salina | 0 | -- | -- | -- | 1 | 36.0 | 59.0 | 23.0 | 1 | 46.0 | 45.0 | -1.0 | 2 | 41.5 | 46.5 | 5.0 | 3 | 43.6 | 37.0 | -6.6 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Stone | 1 | 32.0 | 28.0 | -4.0 | 8 | 24.0 | 36.3 | 12.3 | 3 | 35.0 | 55.3 | 20.3 | 2 | 38.5 | 42.0 | 3.5 | 6 | 45.6 | 51.0 | 5.4 | 3 | 53.0 | 52.7 | -0.3 | 3 | 54.6 | 54.3 | -0.3 |
| Webber Ele. | 0 | -- | -- | -- | 12 | 29.8 | 50.7 | 20.9 | 7 | 37.7 | 53.8 | 16.1 | 9 | 50.2 | 49.0 | -1.2 | 6 | 47.0 | 42.0 | -5.0 | 9 | 43.0 | 40.1 | -2.9 | 7 | 38.7 | 39.5 | 0.8 |
| Zilwaukee | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| TOTAL | 1 | 32.0 | 28.0 | -4.0 | 76 | 32.0 | 42.0 | 10.0 | 56 | 41.1 | 46.8 | 5.7 | 55 | 45.4 | 45.2 | -0.2 | 58 | 44.0 | 41.4 | -2.6 | 47 | 43.8 | 41.5 | -2.3 | 48 | 38.7 | 39.9 | 1.2 |

TABLE D.6. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING AND GRADE FOR ALL ESEA MIGRANT PUPILS IN MATHEMATICS BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| BUILDING | GRADE K | | | | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| E. Baillie | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Coulter | 0 | -- | -- | -- | 3 | 50.0 | 48.3 | -1.7 | 3 | 52.3 | 49.6 | -2.7 | 1 | 63.0 | 93.0 | 30.0 | 1 | 42.0 | 40.0 | -2.0 | 2 | 51.5 | 52.5 | 1.0 | 0 | -- | -- | -- |
| Emerson | 0 | -- | -- | -- | 5 | 25.8 | 30.4 | 4.6 | 4 | 52.7 | 52.5 | -0.2 | 4 | 44.0 | 38.7 | -5.3 | 4 | 53.5 | 47.2 | -6.3 | 1 | 35.0 | 32.0 | -3.0 | 1 | 49.0 | 68.0 | 19.0 |
| Fuerbringer | 0 | -- | -- | -- | 2 | 53.0 | 74.5 | 21.5 | 2 | 56.5 | 57.5 | 1.0 | 2 | 68.5 | 64.5 | -4.0 | 1 | 47.0 | 31.0 | -16.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Nelle Haley | 0 | -- | -- | -- | 4 | 52.5 | 70.0 | 17.5 | 4 | 83.7 | 45.5 | -38.2 | 4 | 43.5 | 39.7 | -3.8 | 6 | 56.0 | 41.5 | -14.5 | 4 | 56.0 | 56.5 | 0.5 | 2 | 63.0 | 60.5 | -2.5 |
| Handley | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Heavenrich | 0 | -- | -- | -- | 1 | 20.0 | 55.0 | 35.0 | 1 | 76.0 | 62.0 | -14.0 | 1 | 66.0 | 72.0 | 6.0 | 0 | -- | -- | -- | 1 | 60.0 | 51.0 | -9.0 | 1 | 50.0 | 45.0 | -5.0 |
| Herig | 0 | -- | -- | -- | 3 | 27.0 | 43.3 | 16.3 | 5 | 73.6 | 49.4 | -24.2 | 2 | 59.0 | 48.5 | -10.5 | 1 | 51.0 | 46.0 | -5.0 | 1 | 75.0 | 76.0 | 1.0 | 3 | 41.3 | 56.3 | 15.0 |
| Houghton | 0 | -- | -- | -- | 5 | 43.8 | 65.2 | 21.4 | 3 | 84.3 | 60.3 | -24.0 | 2 | 60.0 | 49.0 | -11.0 | 1 | 98.0 | 99.0 | 1.0 | 1 | 52.0 | 90.0 | 38.0 | 3 | 49.3 | 54.0 | 4.7 |
| Jerome | 0 | -- | -- | -- | 5 | 36.4 | 47.2 | 10.8 | 2 | 57.5 | 68.5 | 11.0 | 1 | 38.0 | 25.0 | -13.0 | 1 | 44.0 | 30.0 | -14.0 | 3 | 57.0 | 42.0 | -15.0 | 2 | 48.5 | 49.5 | 1.0 |
| Jones | 0 | -- | -- | -- | 2 | 61.5 | 45.5 | -16.0 | 0 | -- | -- | -- | 4 | 59.5 | 64.7 | 5.2 | 3 | 47.3 | 45.6 | -1.7 | 3 | 55.0 | 46.0 | -9.0 | 4 | 48.5 | 56.0 | 7.5 |
| Kempton | 0 | -- | -- | -- | 1 | 58.0 | 76.0 | 18.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 73.0 | 44.0 | -29.0 | 0 | -- | -- | -- | 1 | 50.0 | 42.0 | -8.0 |
| Longfellow | 0 | -- | -- | -- | 2 | 28.5 | 26.5 | -2.0 | 3 | 66.6 | 50.6 | -16.0 | 5 | 66.6 | 37.8 | -28.8 | 4 | 35.0 | 73.0 | 38.0 | 3 | 39.0 | 50.6 | 11.6 | 3 | 57.3 | 63.3 | 6.0 |
| Longstreet | 0 | -- | -- | -- | 2 | 24.5 | 38.5 | 14.0 | 1 | 49.0 | 44.0 | -5.0 | 1 | 58.0 | 49.0 | -9.0 | 0 | -- | -- | -- | 1 | 77.0 | 83.0 | 6.0 | 0 | -- | -- | -- |
| J. Loomis | 0 | -- | -- | -- | 6 | 37.1 | 55.6 | 18.5 | 3 | 40.3 | 47.6 | 7.3 | 3 | 58.0 | 39.6 | -18.4 | 7 | 35.2 | 37.5 | 2.3 | 4 | 45.0 | 58.7 | 13.7 | 5 | 51.2 | 43.4 | -7.8 |
| M. Park | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 47.0 | 57.0 | 10.0 | 1 | 24.0 | 29.0 | 5.0 | 3 | 59.0 | 54.3 | -4.7 | 2 | 61.5 | 29.0 | -32.5 | 0 | -- | -- | -- |
| C. Miller | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 99.0 | 93.0 | -6.0 | 1 | 80.0 | 56.0 | -24.0 | 2 | 66.5 | 49.5 | -17.0 | 2 | 70.5 | 65.0 | -5.5 | 1 | 56.0 | 74.0 | 18.0 |
| J. Moore | 0 | -- | -- | -- | 3 | 35.6 | 80.6 | 45.0 | 3 | 46.3 | 43.6 | -2.7 | 1 | 33.0 | 27.0 | -6.0 | 3 | 43.6 | 51.6 | 8.0 | 1 | 34.0 | 46.0 | 12.0 | 3 | 37.0 | 48.6 | 11.6 |
| Morley | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 52.0 | 29.0 | -23.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 1 | 29.0 | 39.0 | 10.0 | 0 | -- | -- | -- |
| J. Rowe | 0 | -- | -- | -- | 11 | 33.5 | 52.4 | 18.9 | 7 | 51.5 | 62.1 | 10.6 | 9 | 47.8 | 54.6 | 6.8 | 5 | 75.8 | 49.8 | -26.0 | 5 | 57.2 | 63.4 | 6.2 | 9 | 48.5 | 51.5 | 3.0 |
| Salina | 0 | -- | -- | -- | 1 | 35.0 | 87.0 | 52.0 | 1 | 57.0 | 93.0 | 36.0 | 2 | 54.0 | 71.5 | 17.5 | 3 | 54.6 | 41.6 | -13.0 | 0 | -- | -- | -- | 0 | -- | -- | -- |
| Stone | 1 | 20.0 | 35.0 | 15.0 | 8 | 31.5 | 45.1 | 13.6 | 3 | 56.0 | 50.6 | -5.4 | 2 | 42.5 | 50.0 | 7.5 | 6 | 44.1 | 46.1 | 2.0 | 3 | 49.3 | 58.3 | 9.0 | 3 | 76.3 | 76.0 | -0.3 |
| Webber Ele. | 0 | -- | -- | -- | 12 | 42.9 | 57.5 | 14.6 | 7 | 58.1 | 55.7 | -2.4 | 9 | 64.1 | 60.5 | -3.6 | 6 | 64.5 | 56.8 | -7.7 | 9 | 43.5 | 42.3 | -1.2 | 7 | 42.0 | 49.4 | 7.4 |
| Zilwaukee | 0 | -- | -- | -- | 3 | 50.0 | 48.3 | -1.7 | 3 | 52.3 | 49.6 | -2.7 | 1 | 63.0 | 93.0 | 30.0 | 0 | -- | -- | -- | 0 | -- | -- | -- | 0 | -- | -- | -- |
| TOTAL | 1 | 20.0 | 35.0 | 15.0 | 79 | 2.4 | 42.0 | 39.6 | 58 | 41.1 | 46.8 | 5.7 | 56 | 45.4 | 45.2 | -0.2 | 58 | 52.9 | 48.7 | -4.2 | 47 | 51.3 | 52.3 | 1.0 | 48 | 49.8 | 54.0 | 4.2 |

TABLE D.7. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING FOR ALL 7-9 MIGRANT STUDENTS IN READING AND MATHEMATICS BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| Subject/ School | GRADE 7 | | | | GRADE 8 | | | | GRADE 9 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| READING | | | | | | | | | | | | |
| Central Jr. | 2 | 31.0 | 28.5 | -2.5 | 1 | 22.0 | 27.0 | 5.0 | 5 | 37.4 | 42.0 | 4.6 |
| North Int. | 15 | 41.4 | 36.0 | -5.4 | 5 | 42.4 | 37.6 | -4.8 | 17 | 41.0 | 41.8 | 0.8 |
| South Int. | 10 | 47.5 | 45.4 | -2.1 | 7 | 37.4 | 37.1 | -0.3 | 17 | 39.6 | 43.4 | 3.8 |
| Webber Jr. | 9 | 36.0 | 36.8 | 0.8 | 6 | 39.8 | 40.6 | 0.8 | 16 | 29.6 | 31.8 | 2.2 |
| System | 36 | 41.1 | 38.3 | -2.8 | 19 | 38.6 | 37.8 | -0.8 | 55 | 36.9 | 39.4 | 2.5 |
| MATHEMATICS | | | | | | | | | | | | |
| Central Jr. | 2 | 43.0 | 45.5 | 2.5 | 1 | 38.0 | 29.0 | -9.0 | 5 | 49.2 | 47.8 | -1.4 |
| North Int. | 14 | 72.6 | 56.6 | -16.0 | 5 | 54.0 | 54.8 | 0.8 | 16 | 53.1 | 51.4 | -1.7 |
| South Int. | 10 | 59.8 | 52.8 | -7.0 | 7 | 46.4 | 42.7 | -3.7 | 16 | 39.4 | 46.9 | 7.5 |
| Webber Jr. | 8 | 49.5 | 40.6 | -8.9 | 5 | 42.0 | 48.8 | 6.8 | 14 | 38.5 | 37.4 | -1.1 |
| System | 34 | 61.6 | 51.0 | -10.6 | 18 | 46.8 | 47.0 | 0.2 | 51 | 44.4 | 45.8 | 1.4 |

TABLE D.8. MEAN NORMAL CURVE EQUIVALENT GAIN BY BUILDING FOR ALL 10-12 MIGRANT STUDENTS IN READING AND MATHEMATICS BASED ON APRIL-MAY, 1989 PRE-TESTING AND APRIL-MAY, 1990 POST-TESTING ON CAT (SPRING TO SPRING).

| Subject/ School | GRADE 10 | | | | GRADE 11 | | | | GRADE 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | | Normal Curve Equivalents | | | |
| | Number Tested | Pre Mean | Post Mean | Mean Gain/ Gain | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss | Number Tested | Pre Mean | Post Mean | Mean Gain/ Loss |
| READING | | | | | | | | | | | | |
| Arthur Hill | 14 | 42.2 | 45.1 | 2.9 | 5 | 34.0 | 37.2 | 3.2 | 2 | 47.0 | 5.5 | -41.5 |
| Saginaw High | 0 | -- | -- | -- | 1 | 76.0 | 58.0 | -18.0 | 0 | -- | -- | -- |
| System | 14 | 42.2 | 45.1 | 2.9 | 6 | 41.0 | 40.6 | -0.4 | 2 | 47.0 | 5.5 | -41.5 |
| MATHEMATICS | | | | | | | | | | | | |
| Arthur Hill | 16 | 52.5 | 47.9 | -4.6 | 5 | 48.8 | 53.4 | 4.6 | 3 | 75.0 | 11.0 | -64.0 |
| Saginaw High | 0 | -- | -- | -- | 1 | 67.0 | 61.0 | -6.0 | 0 | -- | -- | -- |
| System | 16 | 52.5 | 47.9 | -4.6 | 6 | 51.8 | 54.6 | 2.8 | 3 | 75.0 | 11.0 | -64.0 |

TABLE E.1. PERCENT OF 1989-90 STATE BILINGUAL/MIGRANT STUDENTS BY BUILDING AND GRADE ATTAINING OBJECTIVE 33 STATED MAIN IDEA*/OBJECTIVE 36 CENTRAL THOUGHT CAT READING OBJECTIVES AS COMPARED TO 1988-89 DISTRICT-WIDE ATTAINMENT CRITERION FOR GRADE LEVEL.**

| BUILDING | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? |
| E. Baillie | — | — | 27 | — | — | — | 56 | — | — | — | 63 | — | — | — | 41 | — | — | — | 55 | — | — | — | 58 | — |
| Coulter | 4 | 25 | 27 | No | 2 | 50 | 56 | No | 2 | 50 | 63 | No | 2 | 0 | 41 | No | 3 | 67 | 55 | Yes | 2 | 0 | 58 | No |
| Emerson | 11 | 27 | 27 | Yes | 10 | 70 | 56 | Yes | 4 | 50 | 63 | No | 5 | 0 | 41 | No | 1 | 0 | 55 | No | 2 | 100 | 58 | Yes |
| Fuerbringer | 10 | 44 | 27 | Yes | 8 | 75 | 56 | Yes | 4 | 75 | 63 | Yes | 1 | 0 | 41 | No | 2 | 50 | 55 | No | — | — | 58 | — |
| Nelle Haley | 7 | 43 | 27 | Yes | 4 | 75 | 56 | Yes | 6 | 33 | 63 | No | 6 | 17 | 41 | No | 3 | 67 | 55 | Yes | 3 | 50 | 58 | No |
| Handley | — | — | 27 | — | — | — | 56 | — | — | — | 63 | — | — | — | 41 | — | — | — | 55 | — | — | — | 58 | — |
| Heavenrich | 2 | 0 | 27 | No | 2 | 100 | 56 | Yes | 3 | 67 | 63 | Yes | — | — | 41 | — | 1 | 100 | 55 | Yes | 1 | 100 | 58 | Yes |
| Herig | 12 | 50 | 27 | Yes | 6 | 50 | 56 | No | 2 | 50 | 63 | No | 2 | 50 | 41 | Yes | 2 | 50 | 55 | No | 3 | 0 | 58 | No |
| Houghton | 6 | 17 | 27 | No | 6 | 67 | 56 | Yes | 2 | 100 | 63 | Yes | 1 | 100 | 41 | Yes | 1 | 0 | 55 | No | 3 | 33 | 58 | No |
| Jerome | 13 | 38 | 27 | Yes | 7 | 57 | 56 | Yes | 3 | 100 | 63 | Yes | 3 | 0 | 41 | No | 3 | 33 | 55 | No | 8 | 25 | 58 | No |
| Jones | 3 | 0 | 27 | No | — | — | 56 | — | 4 | 50 | 63 | No | 3 | 0 | 41 | No | 3 | 0 | 55 | No | 4 | 50 | 58 | No |
| Kempton | 4 | 75 | 27 | Yes | 4 | 75 | 56 | Yes | 2 | 100 | 63 | Yes | 4 | 0 | 41 | No | — | — | 55 | — | 1 | 0 | 58 | No |
| Longfellow | 4 | 50 | 27 | Yes | 7 | 57 | 56 | Yes | 6 | 50 | 63 | No | 6 | 33 | 41 | No | 5 | 25 | 55 | No | 4 | 25 | 58 | No |
| Longstreet | — | — | 27 | — | 3 | 67 | 56 | Yes | 2 | 50 | 63 | No | 2 | 0 | 41 | No | 1 | 100 | 55 | Yes | — | — | 58 | — |
| J. Loomis | 7 | 14 | 27 | No | 6 | 67 | 56 | Yes | 3 | 33 | 63 | No | 9 | 22 | 41 | No | 5 | 40 | 55 | No | 5 | 40 | 58 | No |
| Merrill Park | 11 | 45 | 27 | Yes | 5 | 40 | 56 | No | 3 | 33 | 63 | No | 3 | 0 | 41 | No | 3 | 67 | 55 | Yes | — | — | 58 | — |
| C. Miller | 3 | 33 | 27 | Yes | 2 | 50 | 56 | No | 1 | 0 | 63 | No | 3 | 0 | 41 | No | 2 | 0 | 55 | No | 1 | 0 | 58 | No |
| John Moore | 14 | 64 | 27 | Yes | 9 | 56 | 56 | Yes | 2 | 0 | 63 | No | 4 | 25 | 41 | No | 1 | 0 | 55 | No | 8 | 25 | 58 | No |
| Morley | 3 | 33 | 27 | Yes | 3 | 0 | 56 | No | 1 | 100 | 63 | Yes | — | — | 41 | — | 1 | 0 | 55 | No | — | — | 58 | — |
| J. Rouse | 19 | 16 | 27 | No | 11 | 91 | 56 | Yes | 10 | 30 | 63 | No | 6 | 50 | 41 | Yes | 6 | 67 | 55 | Yes | 9 | 33 | 58 | No |
| Salina | 3 | 33 | 27 | Yes | 2 | 0 | 56 | No | 5 | 80 | 63 | Yes | 3 | 0 | 41 | No | 1 | 0 | 55 | No | 3 | 100 | 58 | Yes |
| Stone | 15 | 33 | 27 | Yes | 7 | 71 | 56 | Yes | 3 | 67 | 63 | Yes | 6 | 33 | 41 | No | 4 | 100 | 55 | Yes | 4 | 67 | 58 | Yes |
| Webber Ele. | 14 | 36 | 27 | Yes | 9 | 67 | 56 | Yes | 11 | 82 | 63 | Yes | 8 | 38 | 41 | No | 12 | 25 | 55 | No | 9 | 56 | 58 | No |
| Zilwaukee | — | — | 27 | — | — | — | 56 | — | — | — | 63 | — | — | — | 41 | — | — | — | 55 | — | 1 | 0 | 58 | No |
| TOTAL | 165 | 36 | 27 | Yes | 113 | 59 | 56 | Yes | 79 | 57 | 63 | No | 77 | 21 | 41 | No | 60 | 42 | 55 | No | 71 | 39 | 58 | No |

*Objective 33 applies only to grade one and Objective 36 is applicable to grades two through six.
**State Bilingual/Migrant program participants will equal or exceed district-wide 1988-89 mastery levels per grade level.

TABLE E.2. PERCENT OF 1989-90 STATE BILINGUAL/MIGRANT STUDENTS BY BUILDING AND GRADE ATTAINING OBJECTIVE 37 DEMONSTRATING EVIDENCE OF READING OBJECTIVE AS COMPARED TO 1988-89 DISTRICT-WIDE ATTAINMENT CRITERION PER GRADE LEVEL.*

| BUILDING | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? |
| E. Baillie | — | — | 26 | — | — | — | 60 | — | — | — | 63 | — | — | — | 56 | — | — | — | 51 | — | — | — | 67 | — |
| Coulter | 4 | 25 | 26 | No | 2 | 0 | 60 | No | 2 | 50 | 63 | No | 2 | 0 | 56 | No | 3 | 67 | 51 | Yes | 2 | 0 | 67 | No |
| Emerson | 11 | 0 | 26 | No | 10 | 70 | 60 | Yes | 4 | 50 | 63 | No | 5 | 25 | 56 | No | 1 | 0 | 51 | No | 2 | 50 | 67 | No |
| Fuerbringer | 10 | 44 | 26 | Yes | 8 | 88 | 60 | Yes | 4 | 75 | 63 | Yes | 1 | 0 | 56 | No | 2 | 50 | 51 | No | — | — | 67 | — |
| Nellie Haley | 7 | 29 | 26 | Yes | 4 | 75 | 60 | Yes | 6 | 67 | 63 | Yes | 6 | 17 | 56 | No | 3 | 33 | 51 | No | 3 | 100 | 67 | Yes |
| Handley | — | — | 26 | — | — | — | 60 | — | — | — | 63 | — | — | — | 56 | — | — | — | 51 | — | — | — | 67 | — |
| Heavenrich | 2 | 50 | 26 | Yes | 2 | 100 | 60 | Yes | 3 | 33 | 63 | No | — | — | 56 | — | 1 | 100 | 51 | Yes | 1 | 100 | 67 | Yes |
| Herig | 12 | 50 | 26 | Yes | 6 | 67 | 60 | Yes | 2 | 100 | 63 | Yes | 2 | 0 | 56 | No | 2 | 0 | 51 | No | 3 | 33 | 67 | No |
| Houghton | 6 | 17 | 26 | No | 6 | 67 | 60 | Yes | 2 | 100 | 63 | Yes | 1 | 100 | 56 | Yes | 1 | 100 | 51 | Yes | 3 | 0 | 67 | No |
| Jerome | 13 | 38 | 26 | Yes | 7 | 86 | 60 | Yes | 3 | 100 | 63 | Yes | 3 | 0 | 56 | No | 3 | 67 | 51 | Yes | 8 | 25 | 67 | No |
| Jones | 3 | 0 | 26 | No | — | — | 60 | — | 4 | 50 | 63 | No | 3 | 0 | 56 | No | 3 | 0 | 51 | No | 4 | 50 | 67 | No |
| Kempton | 4 | 50 | 26 | Yes | 4 | 50 | 60 | No | 2 | 100 | 63 | Yes | 4 | 0 | 56 | No | — | — | 51 | — | 1 | 0 | 67 | No |
| Longfellow | 4 | 25 | 26 | No | 7 | 43 | 60 | No | 6 | 50 | 63 | No | 6 | 33 | 56 | No | 5 | 25 | 51 | No | 4 | 100 | 67 | Yes |
| Longstreet | — | — | 26 | — | 3 | 33 | 60 | No | 2 | 50 | 63 | No | 2 | 0 | 56 | No | 1 | 100 | 51 | Yes | — | — | 67 | — |
| J. Loomis | 7 | 14 | 26 | No | 6 | 50 | 60 | No | 3 | 33 | 63 | No | 9 | 0 | 56 | No | 5 | 40 | 51 | No | 5 | 40 | 67 | No |
| Merrill Park | 11 | 18 | 26 | No | 5 | 40 | 60 | No | 3 | 33 | 63 | No | 3 | 33 | 56 | No | 3 | 100 | 51 | Yes | — | — | 67 | — |
| C. Miller | 3 | 33 | 26 | Yes | 2 | 50 | 60 | No | 1 | 100 | 63 | Yes | 3 | 0 | 56 | No | 2 | 0 | 51 | No | 1 | 100 | 67 | Yes |
| John Moore | 14 | 50 | 26 | Yes | 9 | 33 | 60 | No | 2 | 0 | 63 | No | 4 | 0 | 56 | No | 1 | 0 | 51 | No | 8 | 25 | 67 | No |
| Morley | 3 | 100 | 26 | Yes | 3 | 0 | 60 | No | 1 | 100 | 63 | Yes | — | — | 56 | — | 1 | 0 | 51 | No | — | — | 67 | — |
| J. Rouse | 19 | 26 | 26 | Yes | 11 | 73 | 60 | Yes | 10 | 40 | 63 | No | 6 | 33 | 56 | No | 6 | 83 | 51 | Yes | 9 | 44 | 67 | No |
| Salina | 3 | 33 | 26 | Yes | 2 | 50 | 60 | No | 5 | 100 | 63 | Yes | 3 | 0 | 56 | No | 1 | 100 | 51 | Yes | 3 | 67 | 67 | Yes |
| Stone | 15 | 33 | 26 | Yes | 7 | 57 | 60 | No | 3 | 100 | 63 | Yes | 6 | 17 | 56 | No | 4 | 100 | 51 | Yes | 4 | 100 | 67 | Yes |
| Webber Ele. | 14 | 29 | 26 | Yes | 9 | 56 | 60 | No | 11 | 73 | 63 | Yes | 8 | 13 | 56 | No | 12 | 33 | 51 | No | 9 | 78 | 67 | Yes |
| Zilwaukee | — | — | 26 | — | — | — | 60 | — | — | — | 63 | — | — | — | 56 | — | — | — | 51 | — | 1 | 0 | 67 | No |
| TOTAL | 165 | 32 | 26 | Yes | 113 | 59 | 60 | No | 79 | 63 | 63 | Yes | 77 | 13 | 56 | No | 60 | 49 | 51 | No | 71 | 49 | 67 | No |

*State Bilingual/Migrant program participants will equal or exceed district-wide 1988-89 mastery levels per grade.

TABLE E.3. PERCENT OF 1989-90 STATE BILINGUAL/MIGRANT STUDENTS BY BUILDING AND GRADE ATTAINING OBJECTIVE 39 WRITING TECHNIQUES CAT READING OBJECTIVE AS COMPARED TO 1988-89 DISTRICT-WIDE ATTAINMENT CRITERION PER GRADE LEVEL.*

| BUILDING | GRADE 1 | | | | GRADE 2 | | | | GRADE 3 | | | | GRADE 4 | | | | GRADE 5 | | | | GRADE 6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? | Number Tested | 89-90 % | 88-89 % | Criterion Achieved? |
| E. Baillie | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 28 | — | — | — | 40 | — | — | — | 37 | — |
| Coulter | — | — | — | — | — | — | — | — | — | — | — | — | 2 | 100 | 28 | Yes | 3 | 67 | 40 | Yes | 2 | 0 | 37 | No |
| Emerson | — | — | — | — | — | — | — | — | — | — | — | — | 5 | 25 | 28 | No | 1 | 0 | 40 | No | 2 | 50 | 37 | Yes |
| Fuerbringer | — | — | — | — | — | — | — | — | — | — | — | — | 1 | 0 | 28 | No | 2 | 0 | 40 | No | — | — | 37 | — |
| Nelle Haley | — | — | — | — | — | — | — | — | — | — | — | — | 6 | 67 | 28 | Yes | 3 | 33 | 40 | No | 3 | 50 | 37 | Yes |
| Handley | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 28 | — | — | — | 40 | — | — | — | 37 | — |
| Heavenrich | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 28 | — | 1 | 100 | 40 | Yes | 1 | 100 | 37 | Yes |
| Herig | — | — | — | — | — | — | — | — | — | — | — | — | 2 | 0 | 28 | No | 2 | 50 | 40 | Yes | 3 | 33 | 37 | No |
| Houghton | — | — | — | — | — | — | — | — | — | — | — | — | 1 | 100 | 28 | Yes | 1 | 0 | 40 | No | 3 | 0 | 37 | No |
| Jerome | — | — | — | — | — | — | — | — | — | — | — | — | 3 | 67 | 28 | Yes | 3 | 0 | 40 | No | 8 | 13 | 37 | No |
| Jones | — | — | — | — | — | — | — | — | — | — | — | — | 3 | 0 | 28 | No | 3 | 0 | 40 | No | 4 | 75 | 37 | Yes |
| Kempton | — | — | — | — | — | — | — | — | — | — | — | — | 4 | 25 | 28 | No | — | — | 40 | — | 1 | 0 | 37 | No |
| Longfellow | — | — | — | — | — | — | — | — | — | — | — | — | 6 | 67 | 28 | Yes | 5 | 25 | 40 | No | 4 | 0 | 37 | No |
| Longstreet | — | — | — | — | — | — | — | — | — | — | — | — | 2 | 0 | 28 | No | 1 | 100 | 40 | Yes | — | — | 37 | — |
| J. Loomis | — | — | — | — | — | — | — | — | — | — | — | — | 9 | 11 | 28 | No | 5 | 0 | 40 | No | 5 | 0 | 37 | No |
| Merrill Park | — | — | — | — | — | — | — | — | — | — | — | — | 3 | 67 | 28 | Yes | 3 | 100 | 40 | Yes | — | — | 37 | — |
| C. Miller | — | — | — | — | — | — | — | — | — | — | — | — | 3 | 0 | 28 | No | 2 | 0 | 40 | No | 1 | 100 | 37 | Yes |
| John Moore | — | — | — | — | — | — | — | — | — | — | — | — | 4 | 75 | 28 | Yes | 1 | 0 | 40 | No | 8 | 13 | 37 | No |
| Morley | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 28 | — | 1 | 0 | 40 | No | — | — | 37 | — |
| J. Rowe | — | — | — | — | — | — | — | — | — | — | — | — | 6 | 67 | 28 | Yes | 6 | 67 | 40 | Yes | 9 | 33 | 37 | No |
| Salina | — | — | — | — | — | — | — | — | — | — | — | — | 3 | 0 | 28 | No | 1 | 100 | 40 | Yes | 3 | 33 | 37 | No |
| Stone | — | — | — | — | — | — | — | — | — | — | — | — | 6 | 100 | 28 | Yes | 4 | 25 | 40 | No | 4 | 33 | 37 | No |
| Webber Ele. | — | — | — | — | — | — | — | — | — | — | — | — | 8 | 50 | 28 | Yes | 12 | 25 | 40 | No | 9 | 33 | 37 | No |
| Zilwaukee | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 28 | — | — | — | 40 | — | 1 | 0 | 37 | No |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 77 | 46 | 28 | Yes | 60 | 32 | 40 | No | 71 | 26 | 37 | No |

*State Bilingual/Migrant program participants will equal or exceed district-wide 1988-89 mastery levels per grade.

END

U.S. Dept. of Education

Office of Education
Research and
Improvement (OERI)

ERIC

Date Filmed

March 29, 1991